

WIRELESS COMMUNICATIONS SYSTEM HAVING VARIABLE GAIN MIXER

ABSTRACT

A wireless communications transceiver system and a variable gain mixer used in the wireless communications transceiver system. The differential mixed output signal of the variable gain mixer is a constant current signal. The gain of the mixer is set by selectively connecting into the input section circuit of the mixer a degeneration impedance. By maintaining the current of the mixed output signal constant, the linearity of the variable gain mixer is maintained constant and there are no changes in harmonic rejection.